Setting Alexandria Police Hospital.

Results 86% of patients with bronchial asthma lived in urban areas, while 64% of patients with parasitic infestation lived in rural areas. Statistically significantly negative correlations were found between blood level of IgE and FEV1% of predicted in patients with bronchial asthma as well as patients with parasitic infestation with r = -0.381, -0.323 at p = 0.006, 0.021 respectively. Inverse relationship was found between blood level of IgE and FEV1/FVC% in patients with parasitic infestation with r = -0.358 with statistical significant difference at p = 0.011.

Conclusions Statistically significance higher values of IgE were found in patients with parasitic infestation compared to patients with bronchial asthma. It was noted that patients with combined bronchial asthma and parasitic infestation demonstrated statistically significance higher values of IgE which suggest a possible synergistic effect of two diseases.

Recommendation Improving personal and environmental hygiene and regular screening, treatment and health education for children as regard parasitic infections is recommended.

Methods Mepolizumab was offered to adolescents with severe eosinophilic asthma not eligible for Omalizumab because of previous allergic reaction (n=2) or failure to respond (n=1) to Omalizumab, or excessively high IgE (n=4). Eosinophilic asthma was confirmed: blood eosinophil count ≥300 cells/μL or exhaled nitric oxide concentration (FeNO) ≥50 ppb in the previous year. All received high-dose ICS + LABA and had low ACT scores (mean 10.4±2.88). Four were on daily oral steroids. Mean exacerbations requiring oral steroids in the previous year were 4.9±1.68. Prior to commencing and before each monthly injection, pulmonary function (FeNO and forced expiratory volume in 1 s (FEV1)), blood eosinophil count, Asthma Control Test (ACT) and Paediatric Asthma Quality of Life Questionnaire (PAQLQ) were measured. Long-term medications not adjusted. Data from clinical case notes.

Results Seven adolescents (mean age 13.9±1.9, range 11–17 years; 5 males, 2 females) each received 4 Mepolizumab doses (100 mg sc) at monthly intervals with no serious adverse reactions. Blood eosinophil count decreased in all (mean pre-treatment 0.8±0.62 × 10^9 cells/L, 0.1±0.06 × 10^9 cells/L after 4 doses). ACT score improved in 6/7 patients (86%) (mean pre-treatment 10.4±2.88, 13.6±5.16 after 4 doses). PAQLQ improved in 4/7 patients (57%) (mean pre-treatment 3.8±1.30, 4.4±1.41). We did not demonstrate improvement in FEV1. Mean FeNO was 15±29 ppb (figure 1). During treatment, none required hospitalisation for asthma attacks, 2/7 patients (29%) were attack free, 5/7 patients (71%) had reduced attack frequency.

Conclusion In adolescents with refractory eosinophilic asthma not eligible for Omalizumab, these data suggest that Mepolizumab is well tolerated, reduces risk of exacerbations, may improve asthma control and quality of life but does not improve lung function.

REFERENCE


P71 MEPOLOZUMAB IN ADOLESCENTS WITH SEVERE EOSINOPHILIC ASTHMA NOT ELIGIBLE FOR OMALIZUMAB: ONE CENTRE’S EXPERIENCE

Abstract P70 Figure 1 Comparison between the three groups according to IgE.

Abstract P71 Figure 1 Pulmonary rehabilitation: walk this way

P72 IS THE USE OF A NOVEL HIGH FREQUENCY AIRWAY OSCILLATING DEVICE FEASIBLE FOR THE MANAGEMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE?